

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method for transporting a molecule through a mammalian barrier membrane of at least one layer of cells comprising the steps of:  
ablating said membrane with a shear device comprising a sheet containing at least one opening and a shear member, where said sheet is contacted with said membrane such that a portion of said membrane is forced through said opening and said shear member ablates said portion of said membrane exposed through said opening; and  
utilizing a driving force to move said molecule through said perforated membrane.
2. (Original) A method of claim 1, wherein said shear member is a shear blade.
3. (Original) A method of claim 2, wherein said portion of said membrane is forced into said opening by a pressure force.
4. (Original) A method of claim 3, wherein said pressure force is mechanical pressure.
5. (Original) A method of claim 3, wherein said pressure force is suction.
6. (Previously Presented) A method of claim 2, wherein said shear device further comprises a driving unit to move said shear blade.
7. (Original) A method of claim 6, wherein said driving unit is powered manually by the user of the device.
8. (Original) A method of claim 6, wherein said driving unit is powered by an electric motor.

Serial No. 09/845,956

9. (Original) A method of claim 1, wherein said membrane is selected from the group consisting of skin, buccal, vaginal, and rectal membranes.
10. (Original) A method of claim 1, wherein said membrane is human skin.
11. (Original) A method of claim 1, wherein said driving force is selected from a group consisting of iontophoresis, electro-osmosis, reverse iontophoresis, electroporation, phonophoresis, pressure gradients, and concentration gradients.
12. (Original) A method of claim 1, wherein said molecule is a pharmaceutical transported through said membrane into said mammal.
13. (Original) A method of claim 12, wherein said pharmaceutical is selected from the group consisting of polysaccharides, peptides, proteins, and polynucleotides.
14. (Original) A method of claim 12, wherein said molecule is a vaccine.
15. (Original) A method of claim 14, wherein said molecule is a vaccine against *Staphylococcus aureus*.
16. (Original) A method of claim 1, wherein said molecule is transported from within said mammal out through said membrane.
17. (Original) A method of claim 16, wherein said molecule is glucose.
18. (Original) A method of claim 6, wherein said device further comprises a sensor, the feedback from said sensor modifies said driving unit.
19. (Original) A method of claim 18, wherein said sensor is selected from the group consisting of pressure sensor, conductivity sensor, impedance sensor, pH and temperature sensor.

Serial No. 09/845,956

20. (Previously Presented) A method of claim 1, wherein said shear member moves parallel to said-shear sheet.

21. (Previously Presented) A method of claim 2, wherein said shear blade moves parallel to said shear sheet.

22. (Original) A method of claim 19, wherein said sensor is an impedance sensor measuring the impedance of the barrier membrane.

23. (Original)A method of claim 22, wherein the measurements from said impedance sensor are relayed to a microprocessor.

24. (New) A method of claim1, wherein the area of at least one of said at least one opening is about 0.001 to 5 mm<sup>2</sup>.